

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-7 (cancelled).

8 (currently amended). A method of reducing deposition of mineral salts from an aqueous supersaturated solution onto a solid surface in contact with the aqueous supersaturated solution which method consists essentially of:

(a) forming a composition comprising a dispersion of either (i) seed crystals of the mineral salt in an aqueous solution of the mineral salt or (ii) seed crystals of a salt isomorphous with the mineral salt in an aqueous solution of the isomorphous salt wherein the dispersed seed crystals are of mean particle size of less than 2.5 microns and have been obtained via generation of cavitation in an aqueous supersaturated solution of the mineral salt or a salt isomorphous with the mineral salt;

(b) distributing said composition into ~~either (i) an aqueous supersaturated solution of the mineral salt or (ii) an aqueous precursor liquid of the aqueous supersaturated solution which aqueous precursor liquid is saturated with respect to the seeds, and in the case of (b)(ii) converting the aqueous precursor liquid into an aqueous supersaturated solution of the mineral salt; and~~ by (i) cooling and/or reducing the pressure of the aqueous precursor liquid or (ii) by adding a complementary iron to the precursor liquid; and;

(c) contacting the aqueous supersaturated solution with the solid surface.

9 (original). A method as claimed in Claim 8 wherein the composition is obtained by subjecting an aqueous supersaturated solution of either (i) the mineral salt or (ii) a salt isomorphous with the mineral salt to sonic or ultrasonic vibration.

10 (original). A method as claimed in Claim 9 wherein the seed crystals have 0.025 – 0.5 times the diameter of crystals of the same mineral salt which crystallise out from an aqueous supersaturated solution thereof in the absence of sonic or ultrasonic vibration.

11 (previously presented). A method as claimed in claim 9 wherein the frequency of the ultrasonic vibration is between 16 and 40kHz.

12 (original). A method as claimed in Claim 11 wherein the energy density applied to the aqueous supersaturated solution by the ultrasonic vibration is in the range of from 1 to 100 J/cm³.

13 (previously presented). A method as claimed in claim 9 wherein the duration of the applied ultrasonic vibration is 0.05 to 360 seconds.

14 (previously presented). A method as claimed in claim 9 wherein the degree of supersaturation of the aqueous supersaturated solution which is subjected to the ultrasonic vibration is 50 to 400 times over the saturation level.

15 (previously presented). A method as claimed in claim 9 wherein the supersaturated solution which is subjected to the ultrasonic vibration is obtained by passing 2 or more aqueous solutions of the separate components of the mineral salt or of the separate components of the isomorphous salt to a locus of mixing, at which locus the aqueous supersaturated solution is formed and the ultrasonic vibration is applied.

16 (previously presented). A method as claimed in claim 8 wherein the percentage weight of seed crystals from the dispersion to the total weight of seed crystals and depositable mineral salts is in the range 10 to 50% w/w.

17 (currently amended). A method as claimed in claim 8 wherein distribution of the composition into the aqueous supersaturated solution or aqueous precursor liquid is performed 2 to 4 times with the distribution being in series or parallel or a combination of both.

18-24 (cancelled).

25 (previously presented). A method as claimed in Claim 8 wherein the mineral salt is selected from the group consisting of alkaline earth metal carbonates and alkaline earth metal sulphates.

26 (previously presented). A method as claimed in Claim 8 wherein the seed crystals are of Mean particle size of 0.5 to 2 microns.

27 (previously presented). A method as claimed in Claim 8 wherein the seed crystals are present in the dispersion in an amount of from 1 to 60% by weight based on the total weight of dispersion.

28 (previously presented). A method as claimed in Claim 8 wherein the seed crystals are barium sulphate crystals and have 3 dimensional distances of length, breadth and thickness, normal to one another, in a ratio of 0.4-1.5:1:0.4-1.5.

29 (previously presented). A method as claimed in Claim 8 wherein the seed crystals have one or more voids therein which voids occupy 5 to 40% of the volume enclosed by the envelope of the outer surface of the seed crystals.

30 (previously presented). A method as claimed in Claim 8 wherein the seed crystals are rounded calcium carbonate crystals having a diameter in the range of 1 to 2.5 microns.

31 (cancelled).

32 (previously presented). A method as claimed in Claim 8 further comprising the step of monitoring the size of the crystals.